CLAIMS

1. A valve assembly comprising:

a replacement valve; and

an anchoring structure comprising one or more sinusoidal inflow rings.

2. The valve assembly of claim 1, wherein said valve is positioned internally to said anchoring structure.

3. The valve assembly of claim 2, wherein said valve comprises an inflow annulus, an outflow annulus, and a plurality of leaflets.

4. The valve assembly of claim 3, wherein said inflow annulus is scalloped.

5. The valve assembly of claim 1, wherein said inflow rings are configured in an inverse sinusoidal pattern.

6. The valve assembly of claim 1, wherein said anchoring structure further comprises one or more sinusoidal outflow rings.

7. The valve assembly of claim 6, wherein said sinusoidal outflow rings are configured in an inverse sinusoidal pattern.

8. The valve assembly of claim 6, further comprising a plurality of longitudinal rods connecting the inflow and outflow rings.

9. The valve assembly of claim 6, wherein the inflow or outflow rings further comprise attachment barbs